WHAT IS CLAIMED IS:

1. A method for identifying a compound that modulates angiogenesis, the method comprising the steps of:

(i) contacting the compound with a ILKAP polypeptide, the polypeptide encoded by a nucleic acid that hybridizes under stringent conditions to a nucleic acid encoding a polypeptide comprising an amino acid sequence of SEQ ID NO:2; and

(ii) determining the functional effect of the compound upon the ILKAP polypeptide.

2. The method of claim 1, wherein the functional effect is determined *in vitro*.

3. The method of claim 2, wherein the functional effect is a physical effect.

4. The method of claim 2, wherein the functional effect is determined by measuring ligand binding to the polypeptide.

5. The method of claim 2, wherein the functional effect is a chemical effect.

6. The method of claim 5, wherein the functional effect is determined by measuring phosphatase activity of the polypeptide.

7. The method of claim 1, wherein the polypeptide is expressed in a eukaryotic host cell.

8. The method of claim 7, wherein the functional effect is a physical effect.

9. The method of claim 8, wherein the functional effect is determined by measuring ligand binding to the polypeptide.

10. The method of claim 1, wherein the functional effect is a chemical or phenotypic effect.

11. The method of claim 11, wherein the polypeptide is expressed in a eukaryotic host cell.

12. The method of claim 11, wherein the host cell is an endothelial cell.

13. The method of claim 12, wherein the functional effect is determined by measuring avb3 expression, haptotaxis, or phosphatase activity.

14. The method of claim 1, wherein modulation is inhibition of angiogenesis.

15. The method of claim 1, wherein the polypeptide is recombinant.

16. The method of claim 1, wherein the polypeptide comprises a sequence of SEQ ID NO:2.

17 . The method of claim 1, wherein the compound is an antibody.

18 . The method of claim 1, wherein the compound is an antisense molecule.

19 . The method of claim 1, wherein the compound is a small organic molecule.

20. A method of modulating angiogenesis in a subject, the method comprising the step of administering to the subject a therapeutically effective amount of a compound identified using the method of claim 1.

21. The method of claim 20, wherein the subject is a human.

22. The method of claim 20, wherein the compound is an antibody.

23. The method of claim 20, wherein the compound is an antisense molecule.

24. The method of claim 20, wherein the compound is a small organic molecule.

25. The method of claim 20, wherein the compound inhibits angiogenesis.

26. A method of modulating angiogenesis in a subject, the method comprising the step of administering to the subject a therapeutically effective amount of a ILKAP polypeptide, the polypeptide encoded by a nucleic acid that hybridizes under stringent conditions to a nucleic acid encoding a polypeptide comprising an amino acid sequence of SEQ ID NO:2.

27. A method of modulating angiogenesis in a subject, the method comprising the step of administering to the subject a therapeutically effective amount of a nucleic acid encoding a ILKAP polypeptide, wherein the nucleic acid hybridizes under stringent conditions to a nucleic acid encoding a polypeptide comprising an amino acid sequence of SEQ ID NO:2.